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NOTES ON THE BIRDS OF REFUGIO COUNTY,
TEXAS.

BY JAMES J. CARROLL.

THE following notes are based on observations made by the writer in Refugio County, southern Texas, during the winter and spring of each year since 1896. The list, while not complete, gives a very fair idea of the avifauna of the county. Refugio County is joined on the west by Bee County where observations have been made and results published by Messrs. Beckham and Sennett, and only a short distance north of Nueces County, which territory has been studied by such eminent ornithologists as Sennett, Hancock, Beckham and Chapman. The results of their researches have been published in the proceedings of various scientific societies.

The San Antonio and Aransas Rivers form respectively its northern and southern boundaries. The interior of the county is well watered by the Mission River and Blanco, Medio, Sauz, Melon, Copano and Chocolate Creeks and other small streams. There are also a number of large fresh water lakes which afford suitable winter habitation for many aquatic species. The eastern border is indented by the Heines Bay, and the southern by the Mission and Copano Bays. The country is flat, has little elevation and is for the most part a prairie, covered more or less with chaparral. There are some groves, however, of red oak (*Quercus rubra texana*), post oak (*Q. stellata*), and live oak (*Q. virens*), which cover considerable areas. The rivers are heavily fringed with the pecan (*Carya olivæformis*), cottonwood (*Populus monilifera*), etc. A broad belt of territory bordering the coast is well timbered with mesquite (*Prosopis juliflora*). The 'mottes' mentioned so frequently are composed of the hackberry (*Celtis occidentalis*) and anaqua (*Ehretia elliptica*), and are dispersed over the prairies at varying intervals. Other trees occurring commonly are huisache (*Acacia farnesiana*), granjeno (*Celtis pallida*), etc.

These brief preliminary and explanatory remarks the writer has

thought, will enable the reader to better understand certain parts of this paper.

1. **Larus argentatus smithsonianus.** AMERICAN HERRING GULL.—Common on the bays in winter.
2. **Larus delawarensis.** RING-BILLED GULL.—Also common on the bays during winter.
3. **Larus atricilla.** LAUGHING GULL.—Very common resident near the bays. Breeds commonly on the islands during the latter half of June.
4. **Sterna caspia.** CASPIAN TERN.—Tolerably common on the bays. Breeds on the islands in May and June.
5. **Sterna maxima.** ROYAL TERN.—Much commoner than *S. caspia*, which it so closely resembles. Breeding localities and dates about the same.
6. **Gelochelidon nilotica.** GULL-BILLED TERN.—Tolerably common breeder on the islands.
7. **Sterna forsteri.** FORSTER'S TERN.—Common on the bays. Breeds.
8. **Sterna antillarum.** LEAST TERN.—Not very common.
9. **Hydrochelidon nigra surinamensis.** BLACK TERN.—Have found this Tern to be rare; frequents inland ponds. Though they remain as late as May, have never found them breeding.
10. **Rynchops nigra.** BLACK SKIMMER.—One of the most common birds on the bays, breeding in great numbers on the islands in May and June. Local name 'Shearwater.'
11. **Anhinga anhinga.** ANHINGA.—Not rare, nor yet very common. I have seen quite a number on the Arroya Chocolate, which is well fringed with trees, in May, and I think it very probable that they breed there, though I have not found a nest. Have been told by competent observers that they breed in the county. Local name, 'Water Turkey.'
12. **Phalacrocorax mexicanus.** MEXICAN CORMORANT.—Fairly common along the beaches. Have seen them in May but did not find them breeding.
13. **Pelecanus erythrorhynchos.** AMERICAN WHITE PELICAN.—A very common species during the winter months and until late spring. They then congregate in great numbers and migrate.
14. **Pelecanus fuscus.** BROWN PELICAN.—Very common at all seasons in all the bays. Breeding season extends over several months, beginning in February. Nests on the islands.
15. **Lophodytes cucullatus.** HOODED Merganser.—Rather uncommon winter resident. Local name, 'Sawbill.'
16. **Anas boschas.** MALLARD.—A very common winter resident, abounding in the prairie ponds and lakes. Local name, 'Greenhead.'
17. **Anas fulvigula maculosa.** MOTTLED DUCK.—A fairly common resident. Breeds along the mainland near the beach and on the islands, in April.

18. **Chaulelasmus streperus.** GADWALL.—Common winter resident.
19. **Mareca americana.** BALDPATE.—Fairly common in winter in the prairie ponds and lakes.
20. **Nettion carolinensis.** GREEN-WINGED TEAL.—Common in prairie lakes and ponds, in winter.
21. **Querquedula discors.** BLUE-WINGED TEAL.—Found plentifully in the inland ponds during winter.
22. **Spatula clypeata.** SHOVELLER.—A common creek and pond Duck. Have seen them in pairs in summer in the grassy lakes and think they breed, though I have found no nests. Local name, 'Spoonbill.'
23. **Dafila acuta.** PINTAIL.—One of the commonest of the Ducks; abounds on the bays and also on inland lakes and ponds. Local name, 'Sprig.'
24. **Aythya americana.** REDHEAD.—The abundance of these Ducks and *A. vallisneria* is governed by the quantity of wild celery growing in the bays, upon which they feed. Last winter (1899-1900), there being a most abundant celery crop, these two species were quite common.
25. **Aythya vallisneria** CANVAS-BACK.—Like the preceding, very variable as to numbers. Both the present species and *A. americana* are much sought by the hunters because of the great demand for them. The winter of 1895-96 found Canvas-backs rare, and the local hunters were paid for them at Rockport, \$5 per pair.
26. **Aythya affinis.** LESSER SCAUP.—Very common in the bays in winter.
27. **Charitonetta albeola.** BUFFLEHEAD.—A very common pond and creek Duck in winter.
28. **Chen hyperborea nivalis.** SNOW GOOSE.—By far the most common Goose of the county. It abounds everywhere in the vicinity of water; in prairie ponds, lakes and on the bays. Local name, 'Brant.'
29. **Anser albifrons gambeli.** AMERICAN WHITE-FRONTED GOOSE.—Fairly common during winter. Known locally as 'Speckled Brant.'
30. **Branta canadensis.** CANADA GOOSE.—Common during the winter in the bays.
31. **Branta canadensis hutchinsii.** HUTCHINS'S GOOSE.—Very common in the prairie ponds and lakes.
32. **Olor columbianus.** WHISTLING SWAN.—Formerly very common winter resident, but of late years becoming exceedingly rare, and the few that come are very shy. This is because of the persecution by hunters.
33. **Ajaja ajaja.** ROSEATE SPOONBILL.—These exquisite birds I have seen but a few times. They are becoming very rare. Called locally 'Flamingo.'
34. **Ardetta exilis.** LEAST BITTERN.—Tolerably common in the marshes and along water courses. Breeds.
35. **Ardea herodias.** GREAT BLUE HERON.—Still comparatively common, but is being rapidly exterminated by plume hunters. They are found wherever there is water; in the bays, prairie lakes, and ponds, and

along creeks and rivers. Breeds in colonies on the islands and also on the mainland far inland. On the islands the nests are placed in cactus, 'Spanish dagger,' in chaparral, or on the ground. On the mainland, chaparral and small trees are used. Breed from February till May or June. Local name, 'Big Silver-gray Heron.'

36. *Ardea egretta*. AMERICAN EGRET.—Rather uncommon. Has become so within the last few years.

37. *Ardea candidissima*. SNOWY HERON.—One of the species much warred upon by the plume hunters. Hence they are fast becoming scarce. Breeds.

38. *Ardea rufescens*. REDDISH EGRET.—Not very common. Breeds.

39. *Ardea cærulea*. LITTLE BLUE HERON.—Not common, resident.

40. *Ardea virescens*. GREEN HERON.—Very common. Frequent ponds and streams. Breeds abundantly in May. Local name, 'Little Silver-gray Heron.'

41. *Nycticorax nycticorax nævius*. BLACK-CROWNED NIGHT HERON.—Common along the water courses. Breeds commonly in May. Local name, 'Qua Bird.'

42. *Grus americana*. WHOOPING CRANE.—A rather rare winter migrant. Have never seen more than half a dozen in company. Are seen feeding in the shallow prairie ponds and are very wary.

43. *Grus mexicana*. SANDHILL CRANE.—When acorns are in plenty, these Cranes are very common in winter, remaining until late spring. Frequent the oak timber, the prairie and ponds.

44. *Porzana carolina*. SORA.—Saw one of this species in a marsh in May, 1899.

45. *Fulica americana*. AMERICAN COOT.—Tolerably common winter resident. Do not think they remain to breed. Local name, 'Bulldoo.'

46. *Recurvirostra americana*. AMERICAN AVOCET.—Tolerably common.

47. *Himantopus mexicanus*. BLACK-NECKED STILT.—A very common resident on the bays and prairie ponds. Breeds in May.

48. *Gallinago delicata*. WILSON'S SNIPE.—A very plentiful winter resident in all marshy ponds.

49. *Tringa fuscicollis*. WHITE-RUMPED SANDPIPER.—Frequents small ponds during winter months.

50. *Tringa minutilla*. LEAST SANDPIPER.—Tolerably common winter migrant.

51. *Tringa alpina pacifica*. RED-BACKED SANDPIPER.—Common in winter.

52. *Ereunetes pusillus*. SEMIPALMATED SANDPIPER.—Winter resident.

53. *Calidris arenaria*. SANDERLING.—Winter resident.

54. *Totanus melanoleucus*. GREATER YELLOW-LEGS.—Found in small ponds and along water courses in winter.

55. *Totanus flavipes*. YELLOW-LEGS.—Common winter resident.

56. **Sympheeria semipalmata inornata.** WESTERN WILLET.—Winter resident. Do not think it breeds.

57. **Bartramia longicauda.** BARTRAMIAN SANDPIPER.—One of the commonest migrants. Very plentiful during migration. In spring of 1899, arrived March 13, and by the 20th was everywhere on the prairies. Local name, 'Plover.'

58. **Numenius longirostris.** LONG-BILLED CURLEW.—A very common migrant, frequenting the prairies. Saw several flocks containing thousands, Nov. 30, 1899.

59. **Charadrius dominicus.** AMERICAN GOLDEN PLOVER.—A very common migrant. Both this species and *B. longicauda* are much hunted for the market. Preëminently a bird of the prairie.

60. **Ægialitis vocifera.** KILLDEER.—Common at all seasons though their numbers are greatly augmented during winter by the migrants from the north. Breed from February to May.

61. **Ægialitis nivosa.** SNOWY PLOVER.—Occurs as a migrant.

62. **Ægialitis wilsonia.** WILSON'S PLOVER.—Tolerably common. May breed, though I have not found a nest.

63. **Arenaria interpres.** TURNSTONE.—Found on the beaches in winter.

64. **Hæmatopus palliatus.** AMERICAN OYSTER-CATCHER.—A very common beach bird, breeding on the islands.

65. **Colinus virginianus texanus.** TEXAN BOBWHITE.—A very abundant resident. Especially common in the chaparral. Also in the high weeds and grass fringing the Aransas River. Breeds commonly in April, May and June.

66. **Tympanuchus americanus attwateri.** ATTWATER'S PRAIRIE HEN.—Formerly abundant but of late years becoming rare. Still a good number are to be found in Roseborough's pasture near Salt Creek. It is fair to presume it breeds there.

67. **Meleagris gallopavo intermedia.** RIO GRANDE TURKEY.—Not so common as a few years ago. I have found a few in the 'Black Jacks,' a region of brush and timber near St. Charles Bay. Possibly a few still remain in the bottoms of the Mission River.

68. **Zenaidura macroura.** MOURNING DOVE.—An exceedingly abundant resident. Possibly more are present in winter, at which season they are gregarious, than in summer. Breed commonly, on the ground and in bushes. A nest containing young was found the second week in January, 1900.

69. **Cathartes aura.** TURKEY VULTURE.—Common resident. An abundant breeder, selecting brush-heaps, clumps of chaparral, caves in arroya banks, and hollow trees as nesting sites, though the hollow trees are used far less by this species than by *C. urubu*. Breeds in April and May.

70. **Catharista urubu.** BLACK VULTURE.—By far the most common of our two Vultures. Constant resident. Nests in hollow trees, under

thick chaparral, and by sides of fallen trees. Nidification season begins earlier with the present species than with *C. aura*, complete sets being found as early as the first half of February.

71. *Elanoides forficatus*. SWALLOW-TAILED KITE.—A rare migrant. Have seen but two or three in the county. Saw one March 29, 1899; another April 6 of the same year. The tall pecan trees bordering the San Antonio River afford most admirable nesting sites, but so far as I can learn, they have never bred in the county.

72. *Ictinia mississippiensis*. MISSISSIPPI KITE.—A very common migrant. Arrived March 6, in 1899. Does not breed.

73. *Circus hudsonius*. MARSH HAWK.—A common winter resident; none remain to breed.

74. *Accipiter velox*. SHARP-SHINNED HAWK.—Rare migrant. Have seen but one and found that dead.

75. *Accipiter cooperi*. COOPER'S HAWK.—Tolerably common in winter. Do not remain in summer.

76. *Parabuteo unicinctus harrisi*. HARRIS'S HAWK.—Common resident. Becomes more common near the coast. Have never seen them in company with *P. cheriway*, nor eating carrion as mentioned by previous writers. Have found their nests in chaparral, scarcely eight feet from the ground, and in the tops of tall trees. Are early breeders, beginning to lay sometimes as early as January. So far as my experience goes, the complement of eggs is more often three or four than two, and immaculate eggs are much commoner than marked ones.

77. *Buteo borealis*. RED-TAILED HAWK.—Not very common, the succeeding subspecies being the predominant variety. Habits identical.

78. *Buteo borealis krideri*. KRIDER'S HAWK.—Rather common resident. Could not be more typical; no subterminal bar; underparts snow-white. Breeding habits similar to those of *borealis*, the main difference being that *krideri* more often places green leaves in its nest. Nidification begins in the latter part of February.

79. *Buteo lineatus allenii*. FLORIDA RED-SHOULDERED HAWK.—Tolerably common in winter. I think none remain to breed.

80. *Buteo albicaudatus sennetti*. WHITE-TAILED HAWK.—Common resident. Frequents the open prairie, which characteristic gives them the local name, 'Prairie Hawk.' Are not molested by ranchmen, who take into consideration their good offices in disposing of noxious mammals. Breed in April and May, placing their nests in top of chaparral or a small tree on the prairie. Eggs two, rarely three, marked eggs being unusual.

81. *Buteo swainsoni*. SWAINSON'S HAWK.—Very common migrant. In spring of 1899 arrived March 28, and was seen in great numbers for two weeks, frequenting alike prairie and wooded land. Their number in 1899 was unusually great.

82. *Aquila chrysaetos*. GOLDEN EAGLE.—Perhaps I should note this Eagle as of doubtful identification, as I did not take the specimen, and it is

so far south of its usual range. But I am almost positive that it was *A. chrysaëtos*, being familiar with all plumages of *H. leucocephalus*. I saw but one, in 1896, and have not seen it since.

83. *Haliæetus leucocephalus*. BALD EAGLE.—By no means rare. Pre-eminently a bird of the prairie. At Willow Lake, during the duck season, I have seen as many as a dozen at once. Their chief diet in winter consists of Ducks and Geese which have been winged by gunners. Nests invariably in the vicinity of prairie ponds. Breeds early—November and December. Nests placed in low trees, sometimes at no greater distance from the ground than 15 feet. Eggs two, very rarely three.

84. *Falco peregrinus anatum*. DUCK HAWK.—Rather uncommon winter resident.

85. *Falco columbarius*. PIGEON HAWK.—Rare winter resident. Have seen a few. The stomach of one killed Jan. 21, 1898, contained the remains of small Sparrow.

86. *Falco richardsoni*. RICHARDSON'S MERLIN.—Very rare.

87. *Falco sparverius*. AMERICAN SPARROW HAWK.—Not rare in winter. None remain through the summer. The winter residents are largely reinforced in early April by migrants from the south. Then all pass northward.

88. *Polyborus cheriway*. AUDUBON'S CARACARA.—Very common resident. I think some pass the winter further south, as they seem more numerous in summer than in winter. Breeds from February until June. Nest in chaparral and small trees on prairie; rarely in edge of timber; never, I think, in the woods. Local name, 'Mexican Buzzard'; called by the Mexicans, 'Totache.'

89. *Pandion haliaëtus carolinensis*. AMERICAN OSPREY.—Not common. In fact I have seen only one in the county, Nov. 25, 1899, on St. Charles Bay. Natives tell me that they are not as common as formerly, and that they once bred here. Local name, 'Fish Hawk.'

90. *Strix pratincola*. AMERICAN BARN OWL.—Not common. Found one frozen during the winter of 1897-98. Formerly bred in caves in arroya banks. Possibly they do yet, but I have not found them so doing.

91. *Asio accipitrinus*. SHORT-EARED OWL.—Saw a single specimen in the spring of 1899.

92. *Syrnium nebulosum helveolum*. TEXAN BARRED OWL.—Tolerably common resident in all parts of the county, especially so in the bottoms of the San Antonio River. Breeds in March.

93. *Megascops asio mccallii*. TEXAN SCREECH OWL.—Rather rare. Have seen but few. Breeds in March and April.

94. *Bubo virginianus pallescens*. WESTERN HORNED OWL.—Very common resident. Adopts the nests of Buteos and Caracaras. Breeding begins in January. Have found their nests far out in the prairie in small mottes, miles from timber.

95. *Speotyto cunicularia hypogaea*. BURROWING OWL.—Very com-

mon during the winter months, though I think none remain to breed. Have been told that they do, but I doubt it.

96. *Geococcyx californianus*. ROADRUNNER.—Observations made in every part of the State where the Roadrunner occurs convince me that in this and counties contiguous, it is commoner than in any other section. Breeds from March until June, possibly later, in chaparral, cactus and small trees. Local name, 'Chaparral Bird'; Mexican name, 'Paisano.'

97. *Coccyzus americanus*. YELLOW-BILLED CUCKOO.—Common summer resident. In spring of 1899 arrived April 18. Breeds in May and June. Sets of five eggs not uncommon.

98. *Ceryle alcyon*. BELTED KINGFISHER.—Rather uncommon resident. A few seen along the Arroyos Medio and Blanco. Breeds in the high banks of the Blanco.

99. *Dryobates scalaris bairdi*. TEXAN WOODPECKER.—Much the commonest of the Picidæ. Occurs commonly in prairie mottes, in deep woods, and trees along streams. Nests early, making the excavation in the small dead branches of trees, usually near the top, or in fence-posts. Local name, 'Speckle-check.'

100. *Melanerpes erythrocephalus*. RED-HEADED WOODPECKER.—Rare winter resident. Have seen only one,—the latter part of November, 1899.

101. *Melanerpes aurifrons*. GOLDEN-FRONTED WOODPECKER.—This species and *D. s. bairdi*, so far as my knowledge goes, are the only resident Woodpeckers in the county. Not so common as the above mentioned species. Breeds in dead stubs in April.

102. *Colaptes auratus*. FLICKER.—Rare migrant. The only bird noted was a single male, March 17, 1899.

103. *Antrostomus carolinensis*. CHUCK-WILL'S-WIDOW.—Tolerably common migrant. In 1899, arrived March 17. Think possibly some remain the entire winter.

104. *Nyctidromus albicollis merrilli*. MERRILL'S PARAUQUE.—Not common. Breeds sparingly. Local name, 'Whip-poor-will.'

105. *Chordeiles virginianus henryi*. WESTERN NIGHTHAWK.—Very common summer resident. In 1899, arrived April 14. Breeds commonly on the prairies in May and June. Local name, 'Bull-bat.'

106. *Chordeiles acutipennis texensis*. TEXAN NIGHTHAWK.—Not so common as *C. v. henryi*. In 1899, arrived April 11. Breeds.

107. *Chætura pelagica*. CHIMNEY SWIFT.—Common migrant. In 1899, arrived April 4.

108. *Trochilas colubris*. RUBY-THROATED HUMMINGBIRD.—Very common during migrations. In 1898, arrived March 25; in 1899, March 13. Some remain throughout the summer, though I have never found a nest here.

109. *Trochilus alexandri*. BLACK-CHINNED HUMMINGBIRD.—Common during migrations. In 1899 it arrived April 11.

110. *Milvulus forficatus*. SCISSOR-TAILED FLYCATCHER.—Abundant

summer resident. In 1898, arrived March 12; in 1899, March 13. Breeds in great numbers in the chaparral and prairie mottes. Local name, 'Spanish Mockingbird.'

111. *Tyrannus tyrannus*. KINGBIRD.—Very common in migration seasons. Quite a number remain throughout the summer. For ten or twelve years, a pair of Kingbirds have placed their nest in the same tree, on the identical spot on the same branch, each successive year. Is it the same pair each year? In 1899, arrived April 7.

112. *Myiarchus crinitus*. CRESTED FLYCATCHER.—Rare summer resident. Much more common during migrations. In 1898, arrived March 30; in 1899, March 13.

113. *Sayornis phœbe*. PHœBE.—Not a very common migrant.

114. *Contopus virens*. WOOD PEWEE.—Very abundant during migrations. In 1899, arrived April 17.

115. *Otocoris alpestris giraudi*. TEXAN HORNED LARK.—Tolerably common. Seems to have great attachment for certain localities. At a certain point on the road about four miles from the Refugio Mission, I seldom fail to find them. Breeds in May.

116. *Corvus americanus*. AMERICAN CROW.—A few frequent the bottoms of the San Antonio River.

117. *Molothrus ater*. COWBIRD.—Common winter resident; associating with *Quiscalus macrourus* and *Scolecophagus cyanocephalus*.

118. *Molothrus ater obscurus*. DWARF COWBIRD.—Very common. Imposes upon the Lark Sparrow more frequently than on any other bird.

119. *Xanthocephalus xanthocephalus*. YELLOW-HEADED BLACKBIRD.—Very rare. Saw one in winter of 1895-96.

120. *Agelaius phœniceus*. RED-WINGED BLACKBIRD.—Common resident. Breeds in prairie ponds in company with *Quiscalus macrourus*, in May and June.

121. *Sturnella magna*. MEADOWLARK.—Tolerably common summer resident, breeding in May.

122. *Sturnella magna neglecta*. WESTERN MEADOWLARK.—Abundant winter resident and a great destroyer of corn crops at planting time.

123. *Icterus spurius*. ORCHARD ORIOLE.—Very common during migrations. In 1899, arrived April 11. Few remain to breed, placing their nests in mesquite trees near the coast.

124. *Icterus galbula*. BALTIMORE ORIOLE.—Tolerably common migrant. In 1899, arrived April 15.

125. *Icterus bullocki*. BULLOCK'S ORIOLE.—Rather rare summer resident. Breeds in May.

126. *Scolecophagus carolinus*. RUSTY BLACKBIRD.—A good many seen during migrations. In 1899, arrived March 3.

127. *Scolecophagus cyanocephalus*. BREWER'S BLACKBIRD.—One of the most abundant winter residents; seen much in company with *Quiscalus macrourus*. Remains until late spring.

128. *Quiscalus quiscula æneus*. BRONZED GRACKLE.—Common in migration season. In 1899, arrived March 3. Found a few pairs breeding with the colony of *Q. macrourus* in June, 1898.

129. *Quiscalus macrourus*. GREAT-TAILED GRACKLE.—Abundant at all times. A common pest. Breeds in immense colonies in May and June. Nests placed in small trees in prairie mottes or in weeds in ponds, about three to five feet above water. Local name, 'Jackdaw.'

130. *Poæcetes gramineus confinis*. WESTERN VESPER SPARROW.—Tolerably common.

131. *Ammodramus sandwichensis*. SAVANNA SPARROW.—Not very common. One taken April 2, 1898.

132. *Ammodramus savannarum perpallidus*. WESTERN GRASSHOPPER SPARROW.—Rare summer resident. Nest containing five fresh eggs was found in May, 1898.

133. *Ammodramus maritimus sennetti*. TEXAN SEASIDE SPARROW.—Rather rare, occurring sparingly along the bays.

134. *Chondestes grammacus*. LARK SPARROW.—Very common, summer resident. Arrived in 1899, March 15. Nests indiscriminately on the ground, in chaparral or in small trees.

135. *Zonotrichia leucophrys*. WHITE-CROWNED SPARROW.—Tolerably common winter resident. Associates with *Spizella pallida*.

136. *Spizella pallida*. CLAY-COLORED SPARROW.—Common winter resident.

137. *Spizella pusilla*. FIELD SPARROW.—Common winter resident.

138. *Juncos hyemalis*. SLATE-COLORED JUNCO.—A few seen in winter. Not common.

139. *Peuæa cassini*. CASSIN'S SPARROW.—Tolerably common. Breeds in April and May.

140. *Melospiza lincolni*. LINCOLN'S SPARROW.—Common during migrations. In 1899, arrived March 14.

141. *Cardinalis cardinalis canicaudus*. GRAY-TAILED CARDINAL.—Common resident. Breeds in April, May, and June.

142. *Pyrrhuloxia sinuata*. TEXAN CARDINAL.—Not common. Breeds sparingly.

143. *Cyanospiza cyanea*. INDIGO BUNTING.—Common migrant. In 1899, arrived April 15.

144. *Cyanospiza ciris*. PAINTED BUNTING.—Rather uncommon summer resident. Breeds in May. In 1899, arrived April 17.

145. *Spiza americana*. DICKCISSEL.—Very common migrant. Do not think any remain to breed. In 1899, arrived April 15.

146. *Calamospiza melanocorys*. LARK BUNTING.—Very common winter resident. Gregarious. Frequent the chaparral.

147. *Piranga rubra*. SUMMER TANAGER.—Rather scarce migrant. In 1899, arrived April 17.

148. *Progne subis*. PURPLE MARTIN.—Rather common summer resident. In 1899, arrived April 6.

149. *Petrochelidon lunifrons*. CLIFF SWALLOW.—Common migrant. In 1899, arrived March 25.

150. *Hirundo erythrogaster*. BARN SWALLOW.—Very common during migrations. In 1899, arrived April 27.

151. *Tachycineta bicolor*. TREE SWALLOW.—Very common migrant. In 1899, arrived March 30.

152. *Stelgidopteryx serripennis*. ROUGH-WINGED SWALLOW.—Common migrant.

153. *Ampelis cedrorum*. CEDAR WAXWING.—Two flocks containing several hundred individuals each were seen February 27, 1899.

154. *Lanius ludovicianus excubitorides*. WHITE-RUMPED SHRIKE.—Very common in winter, frequenting the chaparral. None remain to breed.

155. *Vireo olivaceus*. RED-EYED VIREO.—Tolerably common migrant. In 1899, arrived April 4. Others were seen on the 17th.

156. *Vireo flavifrons*. YELLOW-THROATED VIREO.—Rather uncommon migrant. In 1898, arrived Apr. 1; in 1899, Apr. 11.

157. *Vireo noveboracensis*. WHITE-EYED VIREO.—Common during migrations. In 1899, arrived March 15. Rare summer resident, breeding in May.

158. *Vireo bellii*. BELL'S VIREO.—Tolerably common migrant. Rare summer resident, breeding in April.

159. *Mniotilla varia*. BLACK AND WHITE WARBLER.—Common migrant. In 1898, arrived March 31; in 1899, March 13.

160. *Compsothlypis americana*. PARULA WARBLER.—Very abundant migrant. In 1899, arrived March 13; another wave April 15.

161. *Dendroica aestiva*. YELLOW WARBLER.—Usually a tolerably common migrant. Failed to observe any in 1899.

162. *Dendroica coronata*. MYRTLE WARBLER.—Very common migrant. In 1899, arrived March 13; a few more were seen on April 15.

163. *Dendroica maculosa*. MAGNOLIA WARBLER.—Rather uncommon migrant. In 1898, arrived May 14.

164. *Dendroica blackburniae*. BLACKBURNIAN WARBLER.—Rather uncommon migrant. Arrived in 1899, March 13; another wave April 17.

165. *Dendroica dominica albilora*. Sycamore WARBLER.—Uncommon migrant. In 1899, arrived March 13; a few more April 15.

166. *Dendroica virens*. BLACK-THROATED WARBLER.—Tolerably common migrant. In 1899, arrived April 17.

167. *Seiurus noveboracensis*. WATER-THRUSH.—Common migrant. In 1899, arrived April 15.

168. *Seiurus motacilla*. LOUISIANA WATER-THRUSH.—An uncommon migrant. In 1899, arrived March 17.

169. *Geothlypis trichas*. MARYLAND YELLOW-THROAT.—Common migrant. In 1899, arrived April 15.

170. *Icteria virens*. YELLOW-BREASTED CHAT.—Migrant. Not common. In 1899, arrived April 11.

171. *Wilsonia mitrata*. HOODED WARBLER.—Common migrant. In 1898, arrived March 30; in 1899, March 13.
172. *Setophaga ruticilla*. AMERICAN REDSTART.—Common migrant. In 1899, arrived April 15.
173. *Oroscoptes montanus*. SAGE THRASHER. A few seen in winter.
174. *Mimus polyglottos*. MOCKINGBIRD.—Abundant resident. Breeds in the chaparral and small trees in prairie mottes, in April, May, and June.
175. *Galeoscoptes carolinensis*. CATBIRD.—Common migrant.
176. *Harporhynchus curvirostris*. CURVE-BILLED THRASHER.—Uncommon summer resident. Breeds in May.
177. *Thryothorus bewickii bairdi*. BAIRD'S WREN.—Tolerably common resident.
178. *Parus bicolor texensis*. TEXAN TUFTED TITMOUSE.—Very common.
179. *Parus carolinensis agilis*. PLUMBEOUS CHICKADEE.—Not common.
180. *Auriparus flaviceps*. VERDIN.—Uncommon summer resident.
181. *Polioptila cærulea*. BLUE-GRAY GNATCATCHER.—Common winter resident. Reinforced March 13, 1899, by migrants from the south. Does not remain through the summer.
182. *Hylocichla mustelina*. WOOD THRUSH.—Common migrant. In 1899, arrived April 17.
183. *Hylocichla fuscescens*. WILSON'S THRUSH.—Not a very common migrant. In 1898, arrived May 12. Saw none in 1899.
184. *Merula migratoria*. ROBIN.—In severe seasons, a common winter resident. When the winters are mild, none or very few are present.
185. *Sialia sialis*. BLUEBIRD.—A few spend the winter.